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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,840	06/07/2005	Meng Fei Koh	5731-000009/US/NP	8626
7590 06/20/2007				
Harness Dickey & pierce 7700 Bonhomme Suite 4000 St Louis, MO 63105-1932				
			EXAMINER	
			RACHUBA, MAURINA T	
			ART UNIT	PAPER NUMBER
			3723	
			MAIL DATE	DELIVERY MODE
			06/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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## Office Action Summary

Application No.

10/537,840

Applicant(s)

KOH ET AL.

Examiner

Maurina Ráchuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. Applicant's amendment has overcome the rejections under 35 USC 102.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 12-15, 17, 18, 20, 25, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasbaugh, 5,423,716 in view of Hollatz et al, 6,695,687 . '716, figures 1 and 2 and column 3, lines 27 through column 4, lines 55, discloses the claimed invention except for **a plurality** of through holes, and the inner chamber wall having an orifice by which a fluid pressure lower than that external to the chamber may be selectively applied to the chamber, and the orifice in the inner chamber wall is in at

least indirect fluid pressure communication with the grooves and through holes in the perforated plate when the plate is in the second configuration. '687, in a similar device, teaches a plurality of through holes, and the inner chamber wall having an orifice by which a fluid pressure lower than that external to the chamber may be selectively applied to the chamber, and the orifice in the inner chamber wall is in at least indirect fluid pressure communication with the grooves and through holes in the perforated plate when the plate is in the second configuration. Note that the examiner considers 27 to be part of the inner chamber wall. It would have been obvious to one of ordinary skill to have provided '718 with the plurality of through holes, and the inner chamber wall having an orifice by which a fluid pressure lower than that external to the chamber may be selectively applied to the chamber, and the orifice in the inner chamber wall is in at least indirect fluid pressure communication with the grooves and through holes in the perforated plate when the plate is in the second configuration, as taught by '687, figure 3 and column 7, lines 37-64, to ensure proper planarity of the wafer, and to provide better control of the plate by providing a controllable fluid pressure, rather than a constant spring pressure.

5. Claims 16, 19, 21-24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasbaugh, 5,423,716 in view of Hollatz et al, 6,695,687 as applied to claim 12 above, and further in view of Chen, 6,611,417. '716 as modified by '687 does not disclose the hole and groove configurations as claimed. In a wafer holding device, '417 discloses the use of a perforated plate provided with through holes, at different radial positions on the plates, pairs of holes connected by grooves, for holding

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a wafer during processing. It would have been obvious to one of ordinary skill in the art to have provided '716 with the perforated plate hole and groove configurations taught by '417, to allow gas to flow evenly across the back surface of a chucked wafer, and to control the temperature of the wafer during processing, see column 4, lines column 3, lines 65 through column 4, lines 65.

### ***Response to Arguments***

6. Applicant's arguments, see pages 7-9, filed 16 April 2007, with respect to the rejection(s) of claim(s) 12 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Strasbaugh, 5,423,716, Hollatz et al, 6,695,687 and Chen, 6,611,417. This action is made non-final to allow applicant fair opportunity to respond.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. Rachuba/  
Primary Examiner  
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